CAT I AVIATION PQDR PROGRAM REVIEW

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30 January 2004

AGENDA

Update of Feb 03 Program Agenda Items

- Status Of Automation/Enterprise Integration
- PQDR Status/Trends

Resources

- FY03 Budget & Execution
- POM FY04 Budget
- Explain How POM FY05 & Out Year Funding Will Resolve Backlog And Manpower Issues

Explain Internal AMCOM PQDR Process, How PQDRs Are Managed And Key Players

Potential Impact From Reset Program

Status Of Automation/Enterprise Integration

Logistics Modernization Program (LMP) Is Currently Working On A Deficiency Reporting (DR) Process Module.

- **Demo At Moorestown, NJ 13 Jan 04**

The Current LMP Solution Has Significantly Less Capability Than The Current Army Electronic Product Support (AEPS) Electronic Deficiency Reporting System (EDRS) Database.

AMC Is Currently Using the AEPS EDRS Database

- **LMP DR Process Has Significant Operational Issues.**
- **EDRS Still Needs Upgrades To Manage/Track Avn CAT I PQDRs**
- **No Further Changes Will Be Made To EDRS**
- **LMP Will Replace EDRS Once Fielded**

Initial CAT I PQDR Assessment
Initiated By DA G-4 (2 Aug 01)

	Aug 2001	Dec 2003
Aviation Safety		
Process Ownership		
Review & Analysis		
Process Metrics		
Resources		
Contracting / Engineering Services		
Fixing Identified Problems (ACIP)		
Retrograde Visibility		
Enterprise Integration		

What Was Wrong

Aug 2001

Aviation Safety
- Analysis Delayed Due To Shipping
- Lost Exhibits
- Delays in Starting/Completing Analysis

Process Ownership
- Managed In Both RDEC & IMMC
- Multiple Databases Use To Document Process

Review & Analysis
- No R&A In RDEC
- No Command Focus

Process Metrics
- No Process Metrics (#Open/#Closed/Age)
- No Process Visibility
- Did Not Meet DA Regulatory Guidance

What Was Wrong (Con't)

Aug 2001

Resources (BRAC, Funding)

- Lost Significant Engineering Expertise
- Lack Of Funding For Additional Analysis
- No Second Destination Transportation For Exhibits

Contracting / Engineering Services

- Contracts Lack Metric Requirements
- Year To Year Contracts vs. Multiyear
- Insufficient Independent Analysis Lab
- Priorities/Resources Of Contractors

Fixing Identified Problems (ACIP)

- Risk Mitigation Is Passed To Soldier
- Recurring Inspections/Reduced Component Life

Retrograde Visibility

- Condition Code Q Not Used In ARMY System

Enterprise Integration

- None

"Getting In Control" Fixed / Fixing

Dec 2003

Aviation Safety

- **Reduced Average Age From 535 Days To 161 Days**
- **Reduced CAT I PQDRs > 1 Year (AGE) From 183 To 28**

Process Ownership

- **AED Designated As Process Owner By DCG (Feb 03)**
- **Sustainment Engineering Division Designated Functional Group For Aviation CAT I Program (Oct 03)**
- **DA/AMC/AMCOM Focused On Program**

Review & Analysis

- **Monthly AED R&A's**
- **Addresses Metrics/Problems/Process Improvements**

Process Metrics

Dec 2003

"Getting In Control" Fixed / Fixing (Con't)

Resources

- Additional Contract WY For FY2005-FY2011
- Identifying Funding For Additional Analysis
- Identifying Second Destination Transportation Funding For Exhibits

Contracting / Engineering Services

- Adding Metric's To All FY04 Contracts
- Scheduling Program Review On All Contracts
- Requiring Timelines In All FY04 Contracts

Fixing Identified Problems

- Quantified & Prioritized Airframe CIP Requirements
- Developing Business Case To Seek Funding

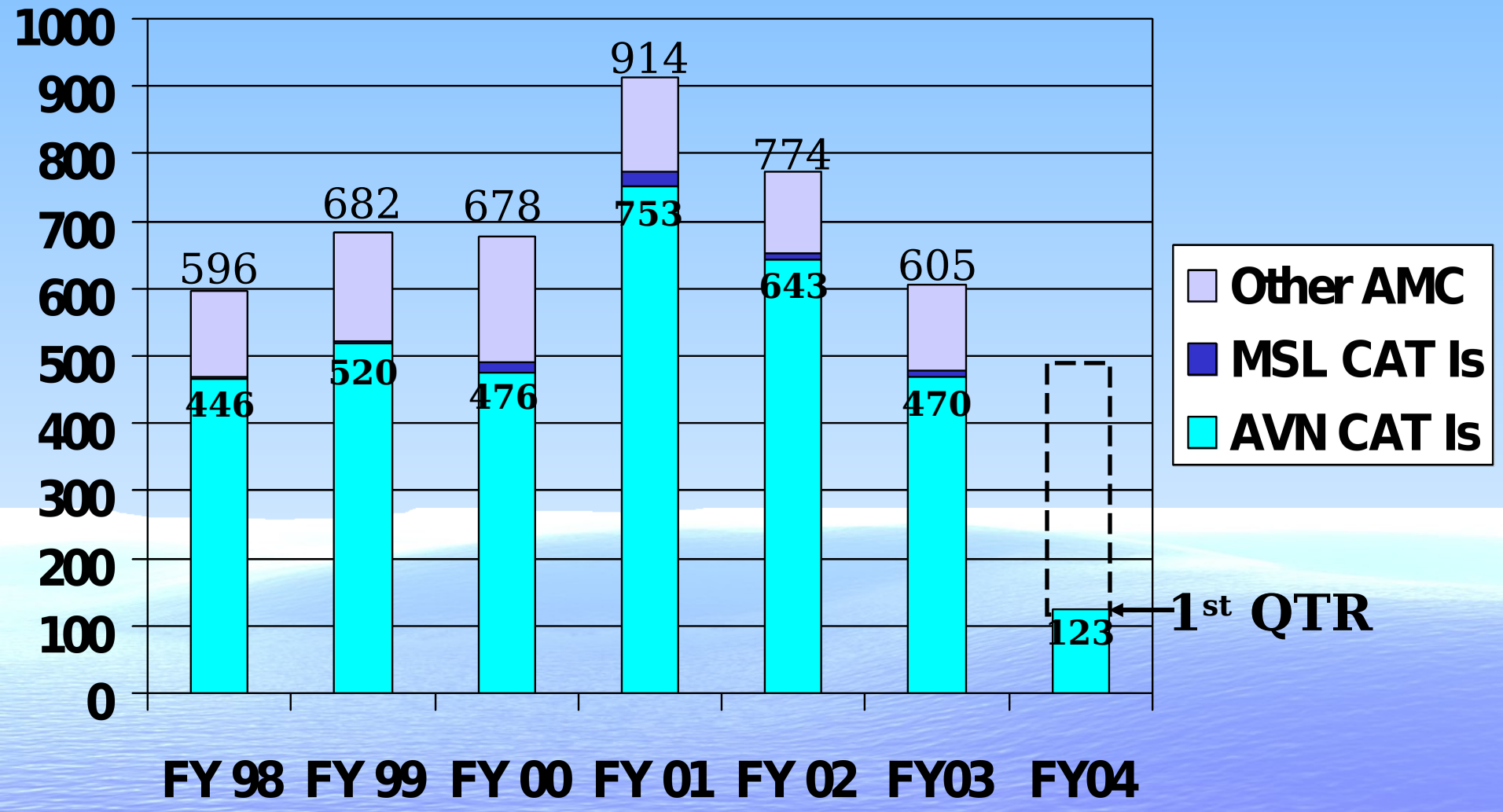
Retrograde Visibility

- AMC/DA G4 Adding Condition Code Q To Log Systems

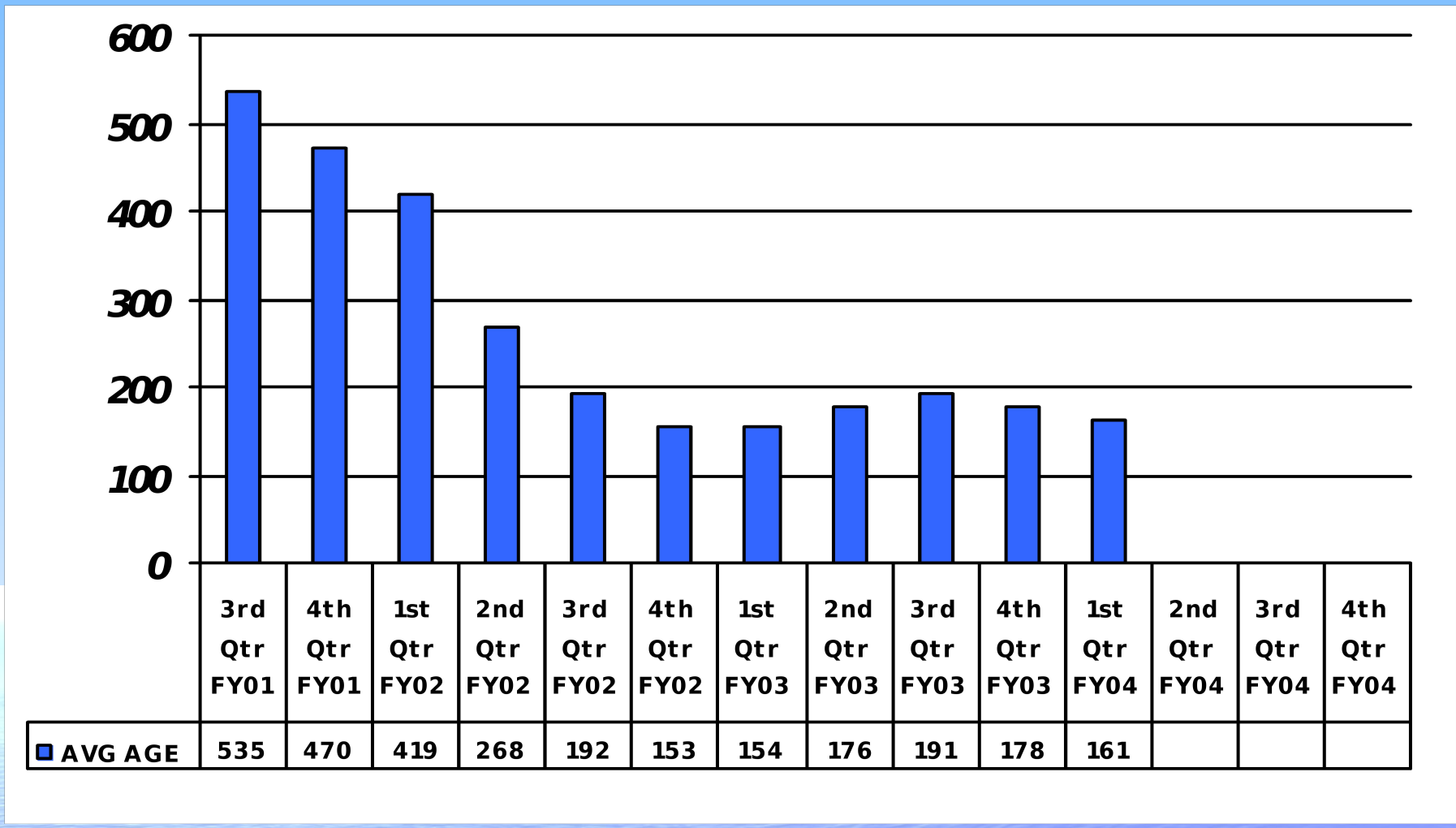
Enterprise Integration

- Working With AMC Steering

CAT I PQDRs Received / Fiscal Year

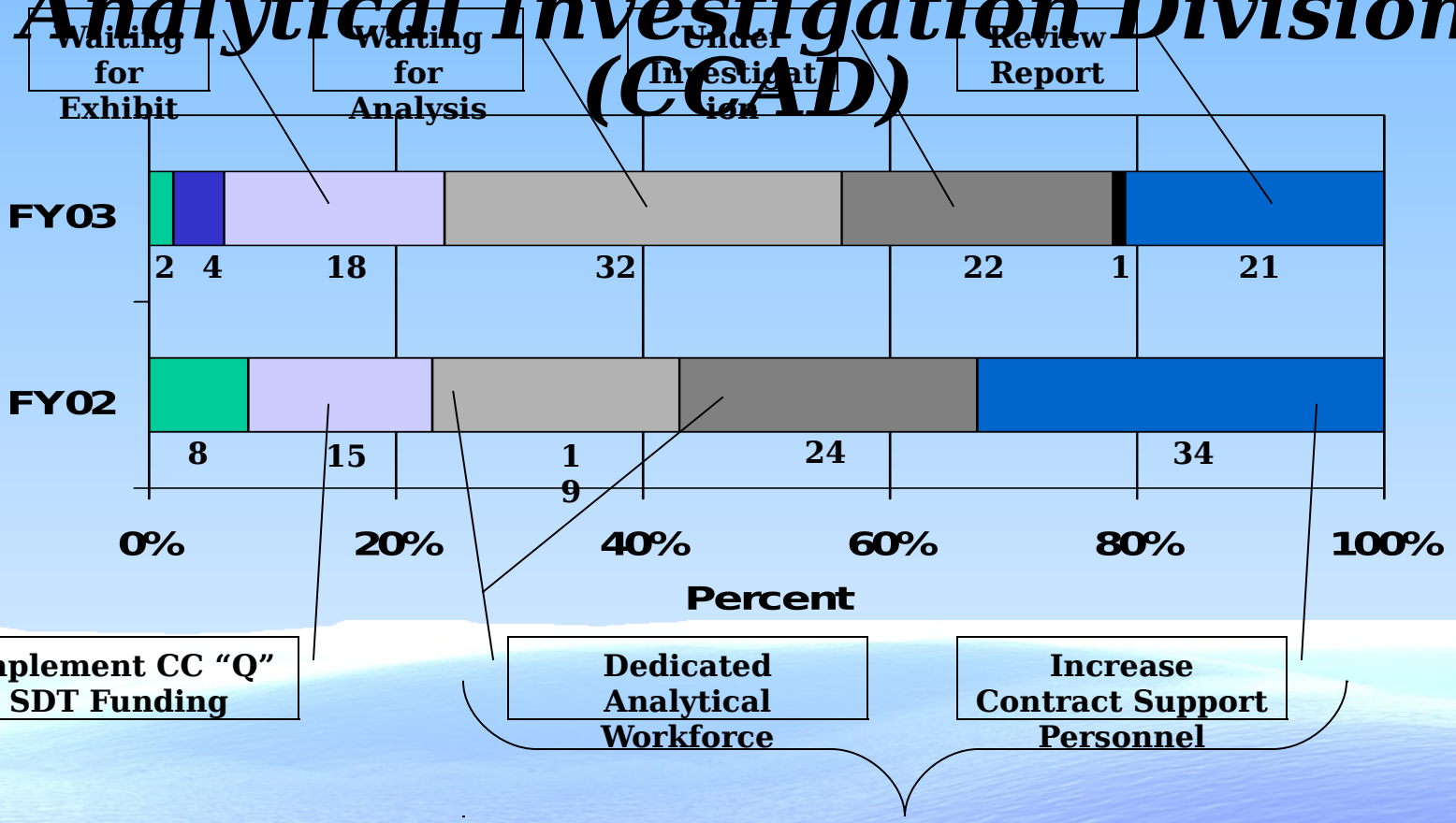


Average Age of Open CAT I PQDRs



Jun 01 – Dec 03

Average Age of Closed CAT I PQDRs Analytical Investigation Division (CCAD)



Working in FY-04/05

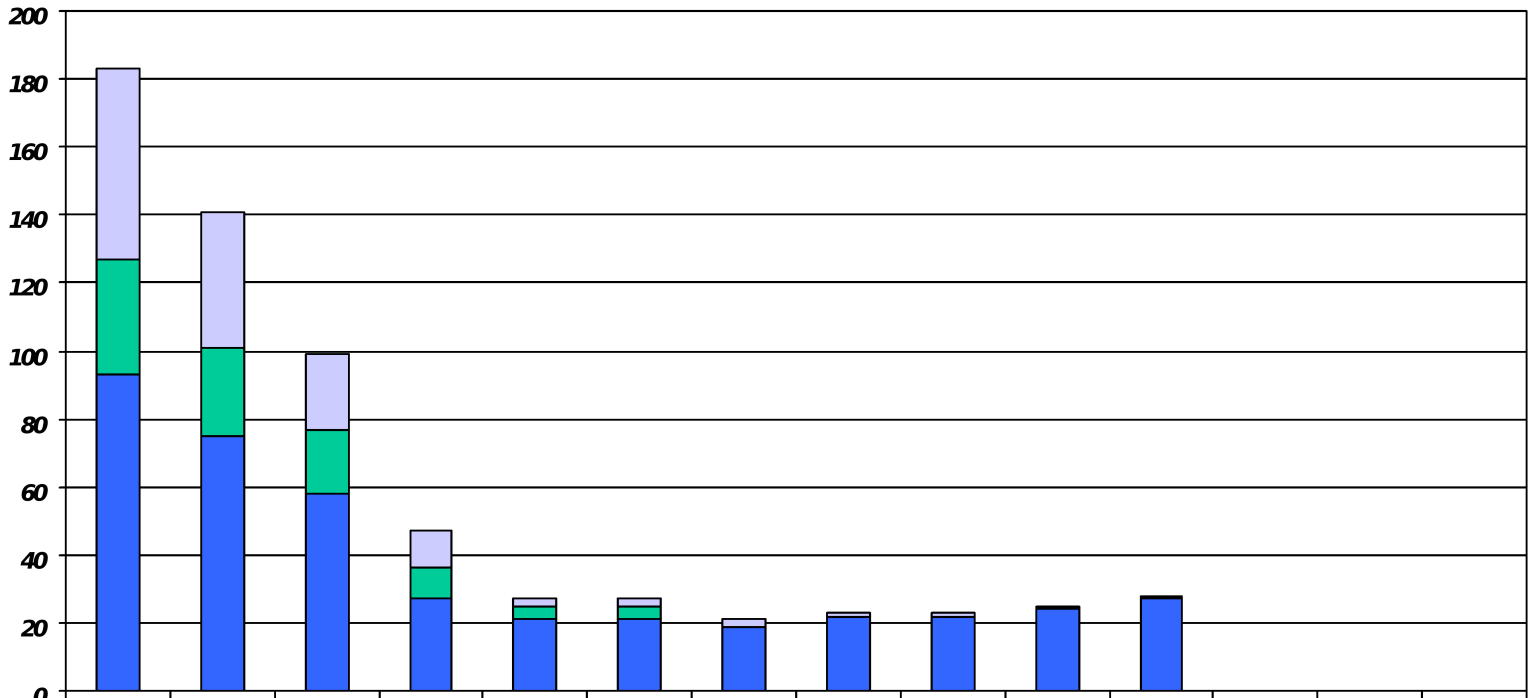
Working in FY-04/05

Note: Currently AMCOM does not have metrics for our OEM

Current Efforts to Reduce CAT I PQDR Processing Times

- Waiting For Exhibit (FY05)
  - Working with AMC/DA on Implementation of Condition Code “Q” into Army Logistics Systems
  - Established the SDT requirements for dedicated shipping of CAT IPQDR exhibits from origin to Analysis destination
- Waiting For Analysis/Exhibit Analysis (FY04/05)
  - Incorporating time constraints and reporting metrics on all new CAT I PQDR analyses contracts (FY04)
  - Increasing work years at CCAD to provide dedicated analysis capability (FY05)
- Review/Approve Report & Close (FY04/05)
  - Increasing work years at AED to shorten review times (FY04/05)

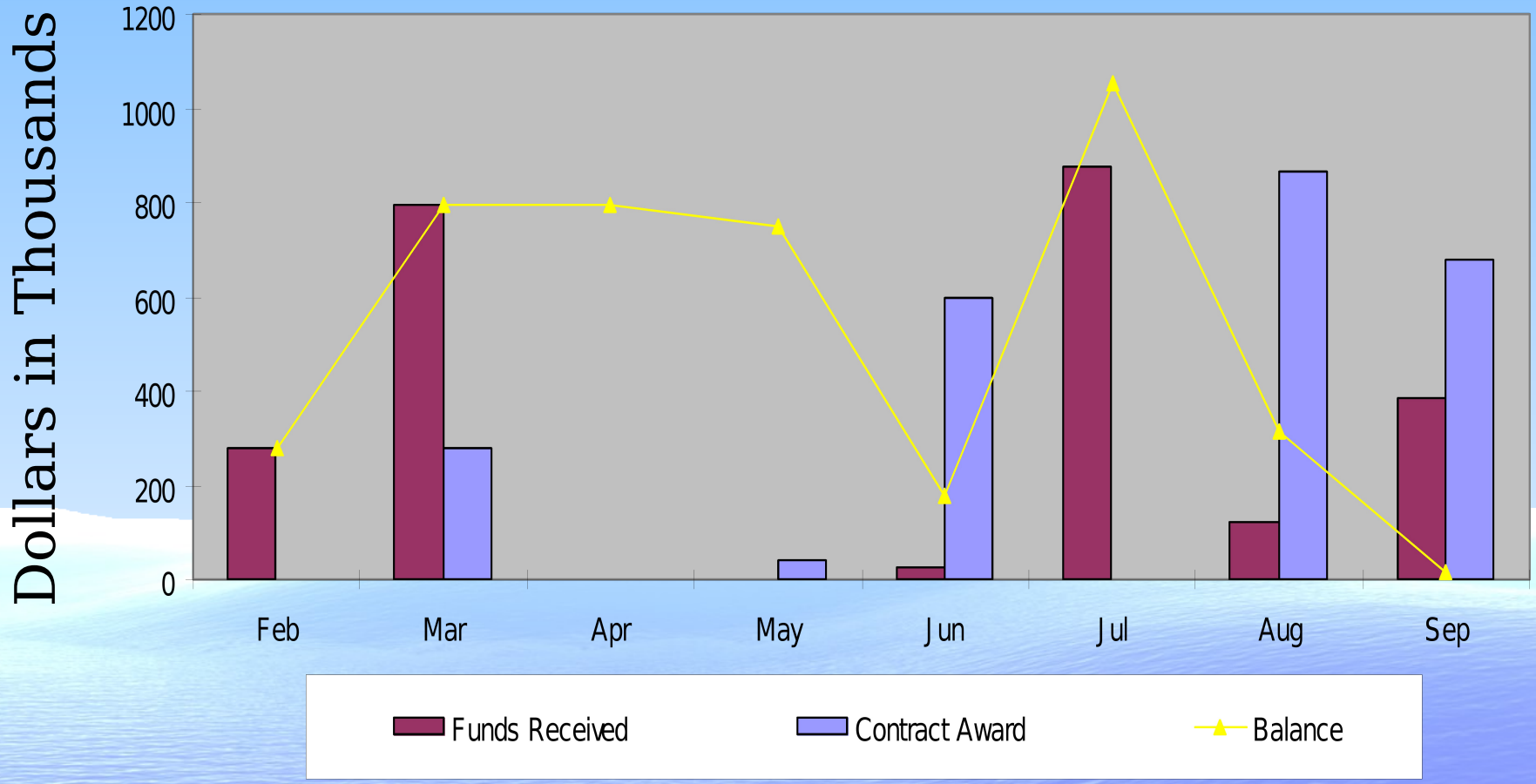
OPEN CAT I PQDRs AGE GROUPS: 1, 2 and 3 YEARS OLD



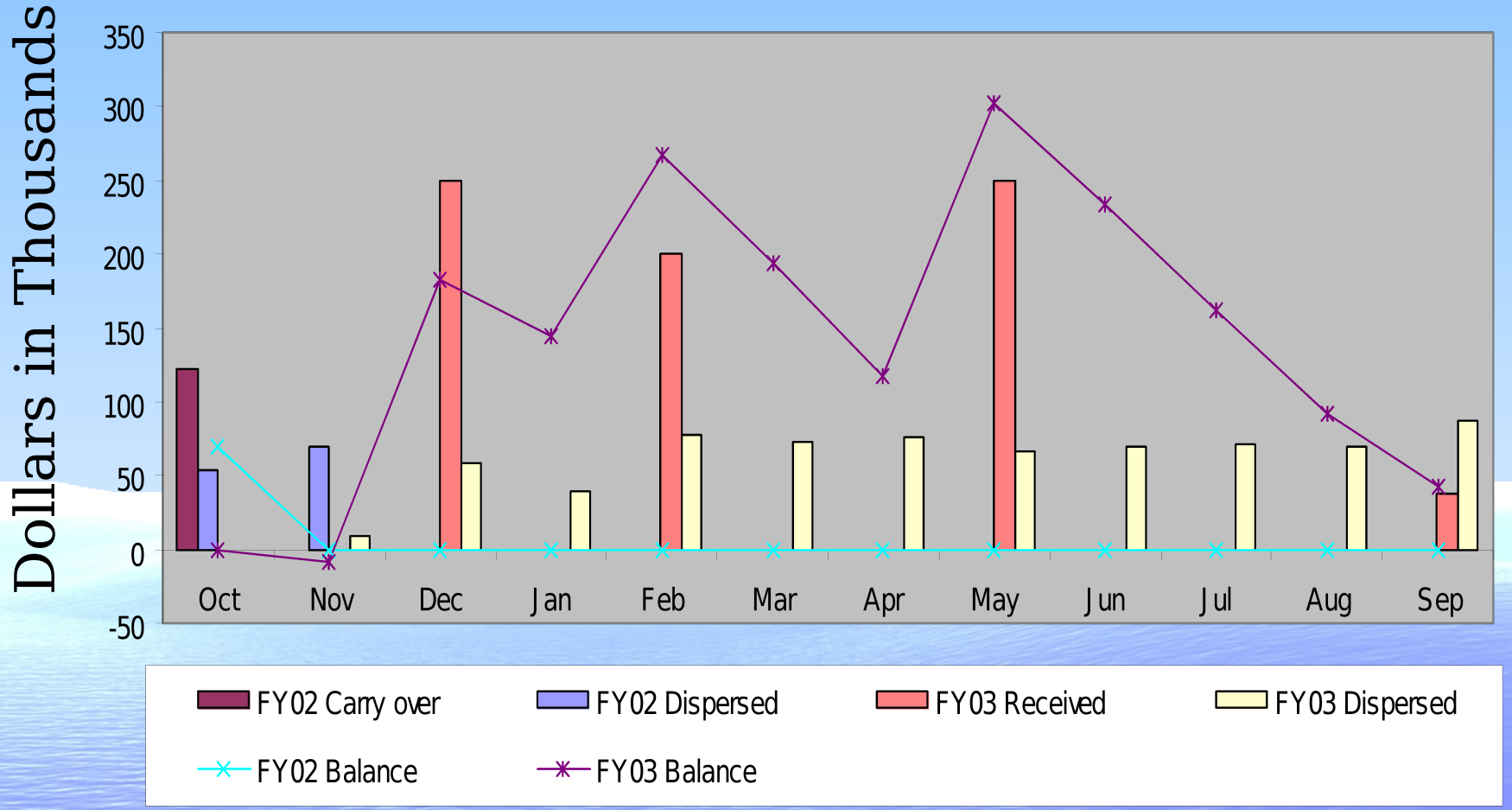
	3rd Qtr FY01	4th Qtr FY01	1st Qtr FY02	2nd Qtr FY02	3rd Qtr FY02	4th Qtr FY02	1st Qtr FY03	2nd Qtr FY03	3rd Qtr FY03	4th Qtr FY03	1st Qtr FY04	2nd Qtr FY04	3rd Qtr FY04	4th Qtr FY04
>3 Years	56	40	22	11	2	2	2	1	1	1	1	0	0	0
2-3 Years	34	26	19	9	4	4	0	0	0	0	0	0	0	0
1-2 Years	93	75	58	27	21	21	19	22	22	24	27	0	0	0

Jun 01 – Dec 03

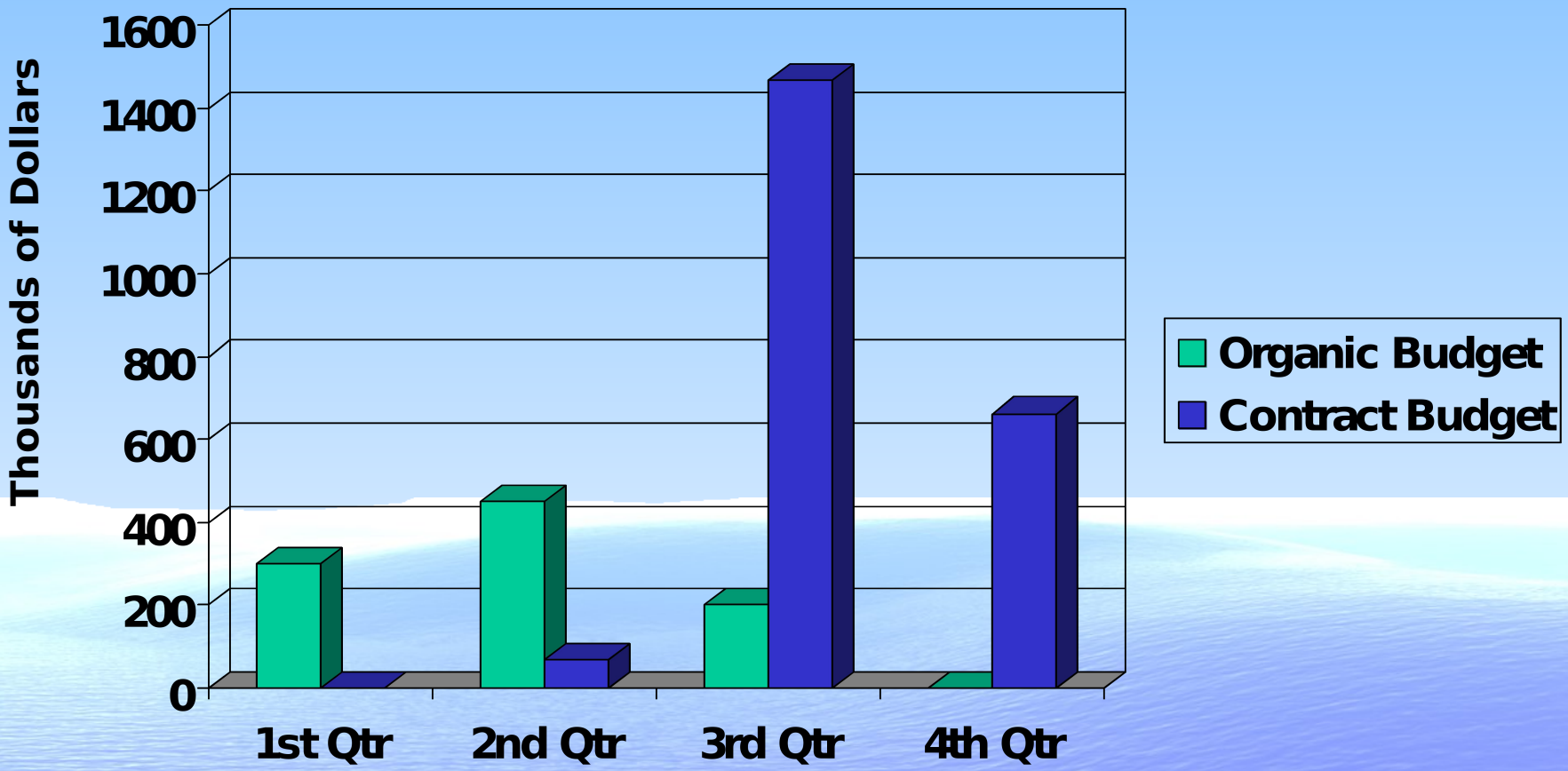
FY03 Contracts Budget & Execution



FY03 Organic Budget & Execution



POM FY04 Budget



Plan For the Future

We've done all we can with existing resources. We still have plenty of room for improvement contingent on future funding.

What's Needed To Make Further Improvements

- **Work Off Backlog (Average Age)**
  - **Reduce the 18% Wait State For Exhibit Analysis**
- **Dedicated Funding For Second Destination Transportation For Exhibits**
- **Dedicated Independent Analysis Facility**
- **Airframe Component Improvement Program**

Resolving Backlog & Manpower Issues

AMCOM Has Established An Increase In Manpower and Funding In The FY 05-09 POM

- **Increases Manpower From 10 to 17 in FY05**
  - **10 In-House Work Years**
  - **Addition of 7 Contract Work Years (Funded in FY05 & out)**
    - **Senior Leader Directed (Priority 14)**
    - **FY04 Requirement: 7 Contract Work Years Funded By Priority 34 Resources (28 Jan 04)**
- **CAT I PQDR Contract changes**
  - **Adding specific Metrics to all OEM PQDR Analysis contracts**
  - **Changing to Multi-Year contracts with Options**

Second Destination Transportation

"What Would it Cost If AMCOM Dedicated SDT Funds For Exhibit Shipment?"

Pulled Two Years of Data From AEPS EDRS to Define:

- The Number of Exhibits Requested Annually For Analysis
- Weight & Cube of Each Exhibit
- Transportation Costs For Origin To Destination of Each Exhibit
  - CONUS (73%) / OCONUS (27%)

AEPS EDRS Data Used To Establish SDT Requirement

- FY02 = $133,000 (Based on Government Transportation System Costs)
- FY03 = $236,000

Currently Determining SDT Requirement Using Commercial Carriers

SDT Requirement to be submitted Into POM FY06-FY11

If Implemented, AMCOM Would Need Funds In FY04-FY05 To Cover SDT

Independent Analysis Facility

Looking Into Establishing An Independent Capability

- **Long Wait Times At CCAD & OEM's**
  - **Other Higher Priorities (Production / Crash Investigations)**

Coordinating Requirements With Other Functions

- **Critical Safety Item Surveillance / Qualification**
  - **Fatigue Tests**
  - **Component Inspection Program**
  - **First Article Test**
- **Engineering Investigations**

Airframe Component Improvement Program

A Three Phased Approach

I	II	III
Identification Phase QDR Submittal/Analysis	**Resolution Phase Correct Deficiency**	**Implementation Phase Incorporate Production Fix**
✓PQDR IPT Implemented to Correct PQDR Submittal, Tracking, and Analysis Process ✓IPT Recommendations: ✓AED Lead ✓Funding ✓Condition Code Q ✓Funding Requirements Identified in POM ➢This Phase Only	• Need to Fix Problems to Improve Safety/Readiness, Reduce O&S Costs • Recommend Aircraft Component Improvement Program (ACIP) to Design/Qualify Solutions • ACIP to be Administered by AMRDEC AED, using Proven Engine CIP Template	• The Only Way to Eliminate Reported Problems (QDR's) and Reduce Safety, Readiness, and Cost Impacts is to Implement Fixes • PM's Submit POM Funding Requirements at the Time of CIP Initiation • Qualified Fixes Incorporated via Engineering Change Proposal (ECP) in Production, RECAP, or

AMCOM PQDR Process

Why are Aviation CAT I PQDRs managed by Aviation Engineering Directorate

Eng Dir

QUALITY ISSUES

- Missile CAT I/II and Aviation CAT II PQDRs
  - Production Processes
  - Readiness Drivers

AVN Eng Dir

FLIGHT SAFETY ISSUES

- Aviation CAT I PQDRs
  - Safety of Flight
  - Aviation Safety Action Messages
  - Airworthiness Authority

CAT I PQDR Process Owner

(OCT 2003)

	PROCESS																				
1	Creation of ODR			D	S		S						M	S							
2	Screening			S	D		M						S				S				
3	Triage			S	S	S	D						S	S		S					
3a	Preliminary Enginering			S	S		D	S	S				S	S		S					
3b	Exhibit Disposition			M	S		D	S	S	S	S	M	S	S		S					
4	Exhibit Tracking			M	M		D	S	S	S	S	M	S	S							
5	Exhibit Analysis				S		M	D	D	M				S	S	S					
6	Engineering Investigation						D	S	S	S				M	S	M					
7	Evaluation					S	D	S	S	S	S			M	S	M	S				
8	Closure			M	M		D						S	S		S	S				
9	Credit Process			M	S		M					D	S	S							
10	DataBases			M	D	M	M	M	S	M	S	M	S	S		S	S				
11	Metrics/Reports				M	S	D	S		S		S	S	S		S	S				

D: Decision Maker	Organizational element that has the most involvement in the process and that has the responsibility of making the majority of the "day-to-day operational" decisions that affect the output of the process.
M: Major Involvement	Organizational element that has the major involvement in the process, but doesn't have the decision making responsibility for the process.
S: Some Involvement	Organizational element that has a limited involvement in the process. They may be in a support role, or provide limited expertise to the process.

Impact Of Reset Program

We Anticipate An Increase In The Number Of CAT I PQDRs From Units Undergoing RESET.

- **Aircraft Undergoing RESET Are Returning From a Higher Than Normal OPTEMPO.**
- **All Aircraft Going Through RESET Will Undergo An Expanded Major Phase Inspection.**
- **This will Lead To The Identification of a Higher Density of Failed Components That May Require Submission of PQDRs.**

Backup

AAA Audit Recommendations

A-2: Incentivize activities to report quality deficiencies by providing them more timely credits for defective parts (exhibits) used during investigations.

A-3: Revise guidance and have MSCs fund transportation costs for shipping exhibits that are needed for investigation.

A-4: Instruct MSCs to have their LARs train personnel at all activities they support on the EDRS system. Further, have the assistance offices identify those activities without ready Internet access and assist them in reporting and monitoring deficiencies. Require assistance offices to report on the activities and personnel trained and the activities requiring their assistance.

AAA Audit Recommendations (Con't)

B-1: Identify key metrics that will enable managers at MSCs, Major Commands, and DA to track and monitor the performance and effectiveness of the quality deficiency reporting system. As a minimum, require metrics that indicate trends of open DRs that exceed the prescribed timelines in AR 702-2. Incorporate these metrics into the HQDA, AMC, and MSC strategic readiness systems.

B-2: Establish guidance that requires action points at MSCs be responsible for tracking and monitoring exhibit movements. Include in the guidance a requirement that action points enter data on exhibit movements.

AAA Audit Recommendations (Con't)

B-3: Reiterate guidance to the MSCs on the importance to complete DRs in a timely matter. Include in guidance, instructions requiring action points to include specified timelines for support points (contractors & depots) to complete investigations within the timelines prescribed by AR 702-7. If prescribed timelines can't be meet, require MSCs to provide justification to AMC for approval.

B-4: Establish a funding process for the deficiency reporting program that enables managers at DA, AMC, and MSCs to evaluate program effectiveness.

Regulatory Policy For Closure

- **Per AR 702-7, PQDR's may be considered closed when:**

  [1] an investigation into the assignable cause has been completed;

  [2] corrective actions to preclude recurrence of the deficiency have been initiated;

  [3] credit and disposition information for the materiel have been provided; and

  [4] exhibit disposition has been initiated.

  *** All four criteria above must be met to close a PQDR**